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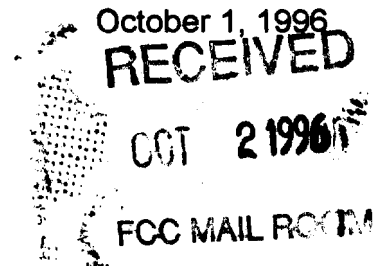
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William F. Canton, Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, DC 20554



Re: In The Matter Of Federal-State Joint Board on
Universal Service

Ex Parte Comments
CC Docket No. 96-45


Dear Mr. Canton:

Enclosed please find an original and nine copies of a paper entitled *An Assessment of Universal Service* by Dr. David Gabel.

Section 364.025(6), Florida Statutes (1995) requires the Office of Public Counsel to submit a report to the Florida Public Service Commission by October 1, 1996, concerning universal service. Since Dr. Gabel's paper addresses many of the issues pending before the Joint Board, we are providing this paper to the Joint Board and its staff as an *ex parte* filing.

Please indicate your receipt of this filing on the additional copy provided and return to the undersigned in the enclosed, self-addressed, postage prepaid envelope. Thank you.

Sincerely yours,


Jack Shreve
Florida Public Counsel

Enclosure

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AN ASSESSMENT OF UNIVERSAL SERVICE

by

DR. DAVID GABEI

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An Assessment of Universal Service

by
Dr. David Gabel

A Report Presented on Behalf of the Office of Public Counsel for the State of Florida

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Preface

"The Legislature finds that the competitive provision of telecommunications services is in the public interest. The commission shall exercise its exclusive jurisdiction in order to protect the public health, safety, and welfare by ensuring that basic local telecommunications services are available to all consumers in the state at reasonable and affordable prices." (Florida Statutes effective July 1, 1995)

"It is the intent of the legislature that universal service...be maintained after the local exchange (telecommunications) market is opened to competitively provided services." (Florida Statutes effective July 1, 1995)

"Quality services should be available at just, reasonable and affordable rates...Consumers in all regions...should have access to telecommunications services...at rates that are reasonably comparable to rates in urban areas....There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service." (Communications Act of 1996 adopted January 3, 1996)

With these words, both the State and Federal governments have ushered in a new era of competition in the provision of local telephone service. They have mandated to the regulatory bodies the responsibility of ensuring that the nation's past commitments to universal service be preserved and advanced for future generations.

This work looks at the issues facing regulators who are charged with the task of implementing the various State and Federal mandates regarding universal service.

Specifically, this report has been prepared at the request of the Office of Public Counsel of the State of Florida for the purpose of submitting a report to the Florida Public Service Commission (PSC) on whether the existing interim mechanism should continue as a means for assisting in the funding of universal service objectives and carrier-of-last-resort obligations or if a different mechanism is needed.

Since passage of the Florida Statutes, many states as well as the Federal Government have passed legislation opening up local exchange telephone service to competition. The Florida Public Service Commission, The Federal Communications Commission and all other State commissions are now facing identical issues: How do we guarantee universal service? How is it to be funded? How much money will it take? Who should pay? What are the relevant costs of universal service? What methodologies are required to quantify the costs?

This paper provides guidance to the Florida Public Counsel in developing recommendations for the Public Service Commission, which is wrestling with the difficult issues of opening up local telephone markets to competition, while preserving affordable, universal telephone service. In reality, this is a document for all regulators who are facing similar problems today.

The paper provides an assessment of costing and pricing issues surrounding the provision of universal telephone service. The 1996 Federal Communications Act has as its overall purpose the promotion of competitive outcomes in the telecommunications industry. Regulatory commissions have been encouraged to adopt policies which bring forth competitive market behavior. Regulation is still required in certain markets, because competitive pressures are not yet sufficiently strong to provide consumers with adequate protection.

Congress and the State Legislature have mandated that the commissions provide consumer safeguards until such time as rivalry can provide them with the prices and quality of goods that are observed under competitive conditions. Competitive telecommunications pricing involves offering choices to customers. It emphatically does not mean recovering from one service, the provision of residential access, the joint and common costs of providing multiple telecommunications services. In competitive markets, access costs that are common to the provision of many products are not recovered solely from the provision of one product. Moreover, customer access charges, contrary to the assertions of the local exchange companies, are a stratagem of monopolistic, not competitive, markets. Chapter Two of this paper provides a compendium of several industries, including telecommunications, that illustrates how access charges decline or disappear under conditions of rivalry. Perhaps because of this knowledge, Congress mandated that regulatory commissions adopt the competitive pricing standard that "services included in the definition of universal service bear no more than a reasonable share of the joint and common costs of facilities used to provide those services." [§254(k)] This provision of the Act prohibits recovering the joint cost of the access line solely from exchange service.

The essence of both Federal and State legislation regarding pricing and universal service suggests that the most appropriate regulatory policy regarding basic residential service rates is to establish a relatively inexpensive basic service platform in the proximity of existing rates. If this strategy is adopted, the future competitive struggles in the telecommunications industry will be largely

focused around optional, vertical services and packaging, while at the same time ensuring affordable access to all. This approach is diametrically opposite the proposals of many of the local exchange companies who envision that basic customers alone will pay for the cost of the platform (access line), thus allowing the interexchange carriers access to the highway free of charge. Regulators must guard against proposed strategies that produce large price increases for basic customers as a by-product of competitive entry.

Competitive market behavior is also the norm that should be used to measure the cost of providing universal service. Around the world nations, have used an avoided-cost methodology to quantify the cost of the universal service obligations. This standard has emerged because it reflects the type of information businesses would use to evaluate capital commitments and market opportunities. In a non-regulated market, a commercial operator measures the benefit or burden of a service by comparing its incremental costs to its revenues. The framework used by unregulated businesses should be used to appraise the burden of the universal service obligation. Chapter Two documents how this principle was used by the unregulated, competitive telephone industry during the early part of the twentieth century.

The current costing tools being considered by the Commission fail to measure either the incremental cost or the revenues associated with providing service to high-cost areas. The models identify the average, not the incremental, cost-of-production. On the revenue side, the models only consider a portion of the revenue derived from customers in high-cost areas. The new entrants in the local telecommunications markets will consider all of the revenues available from potential subscribers. The incremental profitability of a customer from all services should be the basis for judging the cost of providing universal service and carrier-of-last-resort obligations.

Acknowledgments:

I have greatly benefited from the assistance provided by Janet Schloss, Scott Kennedy, and Mark Kennet.

Background Information on Author

Dr. Gabel is an Associate Professor of Economics at the City University of New York. Professor Gabel's area of specialization is telecommunications. In his research, he has focused both on the evolution of telecommunications during the first competitive era of telephony, 1894 to 1913, as well as current developments in telephony. His work has appeared in various journals, including The Journal of Economic History, Harvard Journal of Law and Technology, Journal of Regulatory Economics, Law and Policy, and Telecommunications Policy. He has also coauthored monographs on the cost structure of the telecommunications industry and the regulatory policies of the United Kingdom and New Zealand. He is currently co-editing a book on the pricing of interconnection in network industries (Kluwer 1997).

His current studies focus on the pricing of interconnection in network industries, the cost structure of the telecommunications industry, and a comparison of the evolution of European and North American telephone industries during their first forty years of the industry.

Professor Gabel is also an Affiliated Research Fellow at the Center for Telecommunications and Information Studies at Columbia Graduate School of Business, and an Institute Associate with the National Regulatory Research Institute at The Ohio State University.

CHAPTER I: Defining Universal Service

In this chapter, I address the definition of universal service. As shown on the following chart, Universal Service is defined in terms of availability, accessibility, affordability, and participation in society. These four dimensions are addressed through a discussion of some of the Florida and United States statutory requirements which address universal service.

Table 1: Universal service in telecommunications¹

Dimensions	Universal Service Goals
Universal availability	Full range of identical services available irrespective of location; Universal provision of payphones.
Universal accessibility	Provision of equipment to ensure functionality for all users; Non-discriminatory access to all facilities.
Universal affordability	Removal as far as possible of all financial barriers to telecommunications access and usage; Efforts to redress socio-economic inequality by explicit, targeted programs.
Universal telecommunications and participation in society.	Policies of telecommunications use which enable full participation in society; Protecting freedom of speech and freedom of information through policies of common carriage and content-neutrality; Protecting privacy.

How the States Define Universal Service and Obtain Support

The starting point of the universal service inquiry is to define the concept of universal service and then to identify the services which constitute essential elements of universal service.

¹Helen Cambell, "Beyond Voice Telephony: A Consumer View of Universal Service," Telecommunications Universal Service Symposium, Wellington, New Zealand, July 1996, p. 6.

The National Regulatory Research Institute recently completed a survey of the USO procedures adopted by the different States.² The primary findings of the survey were:

The "basic package" of services most likely to be eligible for universal service support include:

- a) "single-party voice-grade line
- b) connection to the public switched network
- c) local usage
- d) touch-tone capability
- e) provision of a local telephone directory
- f) access to operator services and directory assistance
- g) access to TRS and other services designed for persons with disabilities, and
- h) access to emergency services (911 or E911)"³

NRRI also found that support is based on need, where need takes into account both the income level of the customer and the cost of providing service to high-cost areas.⁴ The USO costs are most often recovered through a surcharge on total intrastate telecommunications revenues. The USO surcharge is often applied to all telecommunications carriers, including wireless services.⁵ In order to obtain universal service support, "a company [must] be a certified telecommunications carrier, serve high-cost areas, and/or provide service to identified, low-income customers."⁶

The Florida Public Service Commission has endorsed the FCC's proposal that universal service should include voice-grade access to the public switched network with the ability to make and receive calls; touch-tone; single-party service; and access to emergency services and to operator services. The Commission also proposed:

...some refinements and some additions to that group. Those were: that the service be flat-rated; that unlimited calling within the local calling area be provided; that more generic terminology, dual tone multifrequency (DTMF), should be used rather than touch-tone; and that provision for access to emergency services be general, rather than restricted to 911. The FPSC further proposed that three additional capabilities

²Edwin A. Rosenberg and John Stanford, "State Universal Service Funding Mechanism: Results of the NRRI's Survey," May 1996, publication 96-14.

³Ibid., p. 14.

⁴Ibid., p. 16.

⁵Ibid., pp. 17-21.

⁶Ibid., p. 25.

be included: access to available interexchange carriers (IXCs) and to directory assistance (DA), and a white pages directory listing.⁷

1996 Telecommunications Act

The Objectives of the Act

The Act requires that advanced telecommunications services be available in "all regions of the Nation." 254(b)(2). Customers in low-income or rural areas should have access to services "that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas." Sec. 254(b)(3). The Act emphasizes that the definition of Universal Service is evolving:

Universal Service is an evolving level of telecommunications services that the Commission shall establish periodically under this section, taking into account advances in telecommunications and information technologies and services. The Joint Board in recommending, and the Commission in establishing, the definition of the services that are supported by Federal universal service support mechanisms shall consider the extent to which such telecommunications services—

- a) are essential to education, public health, or public safety;
- b) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers;
- c) are being deployed in public telecommunications networks by telecommunications carriers; and,
- d) are consistent with the public interest, convenience, and necessity." Sec. 254(c)(1)

This language has the effect of saying that universal service is more than just a rotary telephone with dial-tone. As the needs of consumers evolve, the nature of basic service will change. Furthermore, the government is obligated to provide new telecommunications services to schools, libraries, hospitals, and public safety agencies at reasonable rates (see below).

⁷*In the Matter of Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking*, CC Docket No. 96-45, "Further Comments of the Florida Public Service Commission," August 1, 1996, p. 7. These services are listed in the State's definition of basic local telecommunications service. §364.02(2).

Recovery of the Cost of Providing Universal Service

The Act provides the States with the power to set up their own universal service standards and funding mechanisms as long as they do not conflict with the federal government's policy:

A State may adopt regulations to provide for additional definitions and standards to preserve and advance universal service within that State only to the extent that such regulations adopt additional specific, predictable, and sufficient mechanisms to support such definitions or standards that do not rely on or burden Federal universal service support mechanisms. Sec. 254(f).

The funding of universal service must be done in a manner in which the costs allocated to these essential services are "reasonable." Congress wants to be sure that the universal services are not allocated an unfair portion of the joint and common costs, thereby subsidizing or providing support for competitive services.

A telecommunications carrier may not use services that are not competitive to subsidize services that are subject to competition. The Commission, with respect to interstate services, and the States, with respect to intrastate services, shall establish any necessary cost allocation rules, accounting safeguards, and guidelines to ensure that services included in the definition of universal service bear no more than a reasonable share of the joint and common costs of facilities used to provide those services." Sec. 254(k)

The Conference Report states that this section was adopted from the Senate version of the bill.⁸ The Senate report indicates that it was not Congress' intention that the joint and common costs of the network be recovered exclusively from monopoly services, such as local exchange service:

The (Federal Communications) Commission and the States are required to establish any necessary cost allocation rules, accounting safeguards, and other guidelines to ensure that universal service bears no more than a reasonable share (and may bear less than a reasonable share) of the joint and common costs of facilities used to provide both competitive and noncompetitive services.⁹

Congress' clear intent was the codification of a principle formalized in *Smith v. Illinois Bell Telephone Company*, that the common and joint costs of operating a network should not be

⁸Conference Report for the *Telecommunications Act of 1996*, 104th Congress, 2nd Session, Report 104-458, p. 134.

⁹*Ibid.*, p. 129.

recovered exclusively from monopoly exchange services.¹⁰ As addressed in Chapter Two, in competitive markets, the recovery of joint and common costs is done in a fashion not unlike the approach adopted by Congress.

Common carrier line charge and Funding of Universal Service

The Florida PSC has correctly pointed out that the common carrier line charge (CCLC) is not a universal-service-support mechanism and there is no legal requirement to eliminate the charge.¹¹ The CCLC is a per-minute charge for carrying interexchange traffic over the local loops. It is designed to recover a portion of the loop cost, a cost that is incurred to provide all switched services. Since the loop is used to provide both local and toll services, NARUC, the association that represents the State Public Utility Commissions, has also argued that the CCLC charge should be retained. The CCLC, according to NARUC, "is not a subsidy." NARUC contends that the carriers "should pay a portion of the NTS loop cost, and the associated network expenses, because they use the loop plant to provide their services."¹²

In its recent filing at the FCC, the Commission argued that the CCLC should not be eliminated.¹³ The Commission has long held that to do so would be "contrary to common business

¹⁰282 U.S. 133 (1930).

¹¹*In the Matter of Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking*, CC Docket No. 96-45, "Further Comments of the Florida Public Service Commission," August 1, 1996, p. 14, 16.

The National Exchange Carrier Association, among other parties, has adopted a similar position: "The argument that carrier common line costs and/or USF amounts are 'subsidies' was considered and rejected by the Commission and the Courts years ago." Citing Amendment of Part 67 of the Commission's Rules and Establishment of a Joint Board, Decision and Order, 96 FCC 2nd 781, 785-797 (1984) aff'd sub nom. Rural Telephone Coalition v. FCC, 838 F.2d 1307, 1314-1315 (D.C. Cir. 1988). *In the Matter of Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking*, CC Docket No. 96-45, National Exchange Carrier Association, "Further Comments," August 2, 1996, p. 37, footnote 14.

¹²*In the Matter of Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking*, CC Docket No. 96-45, "Comments of the National Association of Regulatory Utility Commissioners," August 2, 1996.

¹³*In the Matter of Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking*, CC Docket No. 96-45, "Further

practices which is to charge customers for use of fixed cost facilities in the price for goods and services.' [citing Florida PSC Order No. 12265] It is appropriate that each service provide some contribution toward the fixed costs common to those services."¹⁴

The Commission has cautioned that if the interstate CCLC is eliminated and replaced with an end-user fixed fee, the charge per access line would increase by approximately \$3.50 per month. The PSC rightly advised that caution should be exercised before such a change be made, because it could have "unintended and drastic impacts." The Commission further noted that if the CCLC were eliminated, there would be "no guarantee that the benefits would be passed by the [IXCs] through to consumers."¹⁵

Deaveraging of Interexchange Prices

The Act also addresses the deaveraging of long-distance rates. The new law states that carriers can not deaverage their rates; there can not be a difference across States or between urban and rural customers.

"The [Federal Communications] Commission shall adopt rules to require that the rates charged by providers of interexchange telecommunications services to subscribers in rural and high cost areas shall be no higher than the rates charged by each such provider to its subscribers in urban areas. Such rules shall also require that a provider of interstate interexchange telecommunications services shall provide such services to its subscribers in each State at rates no higher than the rates charged to its subscribers in any other State." Sec. 254 (g).

Comments of the Florida Public Service Commission," August 1, 1996, p. 16.

¹⁴Florida Public Service Commission, RE: Investigation into Nontraffic-Sensitive Cost Recovery, Order No. 18598, December 24, 1987, 89 PUR4th 258, 265-66.

¹⁵*In the Matter of Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking*, CC Docket No. 96-45, "Further Comments of the Florida Public Service Commission," August 1, 1996, p. 16.

A similar view was expressed in the Commission's April 1996 submission to the FCC: "We do not believe increases to the SLC are warranted. The result would be a blanket increase to local rates, without benefit to targeted programs or consumer groups." "Comments," Florida Public Service Commission, "In the Matter of: Federal-State Joint Board on Universal Service," p.21, CC Docket No. 96-45, April 11, 1996.

Even if this wording had not been included in the statute, I do not think we would have seen much in the way of rate deaveraging. First, customers do not like it because it is complicated. Sprint has marketed an off-peak "postal rate" of ten cents per minute to anywhere in the United States. MCI and AT&T have matched the rate and also offered their own variations. For example, AT&T offers a 24-hour rate of fifteen cents per minute on domestic calls. Second, geographical cost differences may be declining because of new technology. The IXC's decision to price all calls at the same rate, regardless of distance, is an indicator that some firms believe simplicity in marketing is a profitable strategy.

Who should pay towards the universal service fund

The 1996 federal legislation requires that "every telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis," to the universal service fund. The Act defines a telecommunications carrier as "any provider of telecommunications services, except that such term does not include aggregators of telecommunications services..." The new law defines telecommunications service to mean "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."¹⁶ Therefore, the Act requires suppliers of telecommunications services to the public, with the possible exception of small firms, to pay towards the fund.

Schools and Libraries

The Act makes special provision for schools and libraries. Under the Act, schools and libraries are entitled to receive discounts:

All telecommunications carriers serving a geographic area shall, upon a bona fide request for any of its services that are within the definition of universal service under subsection (c)(3),¹⁷ provide such services to elementary schools, secondary schools,

¹⁶§3(a)(2)(49) and §3(a)(2)(51).

¹⁷(3) SPECIAL SERVICES.--In addition to the services included in the definition of universal service under paragraph (1), the Commission may designate additional services for such support mechanisms for schools, libraries, and health care providers for the purposes of subsection (h).

and libraries for educational purposes at rates less than the amounts charged for similar services to other parties. The discount shall be an amount that the Commission, with respect to interstate services, and the States, with respect to intrastate services, determine is appropriate and necessary to ensure affordable access to and use of such services by such entities. A telecommunications carrier providing service under this paragraph shall:

- I) have an amount equal to the amount of the discount treated as an offset to its obligation to contribute to the mechanisms to preserve and advance universal service; or,
- ii) notwithstanding the provisions of subsection (e) of this section, receive reimbursement utilizing the support mechanisms to preserve and advance universal service. Sec. 254(h)(1)(b).

The Florida Public Service Commission recommended that the services available to schools and libraries for US support "be limited in order to insure that the amount of funds required remains reasonable and to achieve minimum functionality for all schools and libraries." The Commission advocated that the funding mechanism be competitively neutral.¹⁸

The funding mechanism, as recognized by the Commission, should be sufficiently flexible so that the fund can be accessed by any service provider that supplied internet access. Currently and in the near future, the local exchange companies are the primary suppliers of facilities which provide access, but cable companies are trying to develop their own high-speed data modems that could provide superior access to the Internet. If these or similar products reach the market, schools and hospitals will likely use them because of their faster transmission speeds. In order to maintain competitive neutrality, these new services should be able to obtain support from the US fund.

The Commission has suggested that funding be limited to narrowband services. It cites the "cost prohibitiveness of supporting bandwidth and functionality that is beyond services such as POTS lines, 56 kbps digital services, ISDN-BRI or any other similar or interoperable services..."¹⁹ This proposal fails to meet the Commission's objective that the funding of universal services promote

§254(c)(3).

¹⁸Ibid., pp. 9-10.

¹⁹Ibid., p. 11.

competition and be competitively neutral.²⁰ The cable companies' Internet connections will likely be at a much more rapid speed than 56 kbps digital service or ISDN-BRI. The Commission's standard would deny schools and hospitals funding for what might well be a superior product. Such an outcome would be harmful to the competitive process by retarding the growth of cable modems. Schools and hospitals might remain with the slower, subsidized technologies because they lack the necessary funds to afford the superior access provided by high-speed modems. This outcome would not be competitively neutral.

What constitutes affordable service?

The 1996 Communications Act requires that telecommunications services be affordable §254(b)(1) and §254(I). The Florida statute also requires that access to universal-service-related products be provided at such rates that are deemed "affordable." §364.025(1)

The FCC has raised the question of whether it is appropriate to assume that the current rates for the agreed upon universal services are affordable, despite the variations among the companies and the service areas. During the FCC's USO proceeding many commentators, including the Florida Public Service Commission, cited the high penetration rate of telephone service as evidence that the current rates are affordable.²¹

For certain income groups, telephone service is clearly unaffordable. Approximately 20% of American households with annual incomes of less than \$10,000 do not have a telephone.²² However, overall, the nation has received an admirable level of household penetration—94%.²³ The high take-

²⁰Ibid., pp. 10-11.

²¹See for example, *In the Matter of Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking*, CC Docket No. 96-45, "Further Comments of the Florida Public Service Commission," August 1, 1996, p. 2; and National Exchange Carrier Association, "Further Comments," August 2, 1996, p. 1.

²²National Telecommunications and Information Administration, *Falling Through the Net: A Survey of the 'Have Notes' in Rural and Urban America*, Table 1, July 1995.

²³In 1994, 93.5% of the Florida households had telephone service. This penetration rate was 0.3% below the national average of 93.8%. Federal Communications Commission, "Telephone Subscribership in the United States," Table 2, April 1995.

rate should not be seen to satisfy the statutory requirement that "[t]he Commission and the States should ensure that universal service is available at rates that are just, reasonable and affordable." §254(I) Webster's Dictionary defines affordable as "to be able to bear the cost of." TCI incorrectly concludes that "it is safe to say that a consumer who subscribes to telephone service is "able to bear the cost of that service."²⁴ As pointed out by Mark Cooper, Webster's New World Dictionary provides two definitions of the word affordable:

The first definition ('have enough or the means for') is an absolute concept in the sense that there is no qualifier. No matter how much it hurts, if a subscriber continues to pay for telecommunications service, telephone service is deemed by implication to be affordable. The second definition ('bear the cost of without serious inconvenience') is relative in the sense that the burden imposed is qualified by the term 'serious inconvenience.' If it hurts a lot to pay for telephone service, telephone service is not deemed to be affordable, even though the subscriber continues to pay for it.²⁵

Cooper argues that the term affordable should be thought of more in the second sense of the word, as the magnitude of the sacrifices that must be borne in order to obtain service. I recommend that the broader perspective be adopted by the State.

Portable subsidy

The Florida Commission has advocated that the FCC adopt a policy that the lifeline subsidy be portable between carriers: "[T]he federal [Lifeline] support should not go only to the incumbent LEC. The discount should be portable, to afford the customer the ability to select his carrier of choice, including a wireless provider. Additionally, the customer should be allowed to apply the discount to any, or all, of the services included in the definition of universal service, including

²⁴*In the Matter of Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking*, CC Docket No. 96-45, "Comments of Tele-Communications, Inc.," August 2, 1996, pp. 6-7.

²⁵Mark Cooper, "Universal Service: An Historical Perspective and Policies for the 21st Century," p. 10. Benton Foundation and the Consumer Federation of America, attached to their submission in CC Docket No. 96-45, August 2, 1996.

measured service."²⁶ Portability is essential in order for there to be rivalry in high-cost markets. If a subsidy were only provided to incumbents, entrants would be at a competitive disadvantage because they would not be receiving a subsidy for serving the high-cost area.

Legal requirement to eliminate the common carrier line charge

The Florida Commission has correctly pointed out that there is no legal requirement that the CCLC be eliminated in order to comply with the 1996 Telecommunications Act.²⁷ The Commission has also observed that the elimination of the common carrier line charge is not a competitive necessity, since its competitors use the same pricing structure:

The FPSC reiterates that while we acknowledge the flaws in the CCLC, we do not believe that it is essential that it be overhauled immediately in order to comply with the Act. The existence of the CCLC does not discriminate against non LEC providers of local service, and does not impede their entry. (In fact, it appears that Alternative Local Exchange Carriers (ALECs) have adopted this rate design and will assess a CCLC charge to IXC's, too).²⁸

²⁶*In the Matter of Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking*, CC Docket No. 96-45, "Further Comments of the Florida Public Service Commission," August 1, 1996, p. 17-18.

²⁷*In the Matter of Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking*, CC Docket No. 96-45, "Further Comments of the Florida Public Service Commission," August 1, 1996, p. 16.

²⁸*Ibid.*

CHAPTER II: Pricing in Competitive Markets

Recovering access costs: The Debate

The Conference Report for the 1996 Communications Act states that the overall purpose of the law is "to provide for a pro-competitive, deregulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition."²⁹ The Federal government has clearly established a goal of promoting competition. In this section of the paper, I address ways in which the cost of customer access would be recovered in a competitive market.³⁰ The LECs have repeatedly told commissions that competitive market pressures require that this cost be recovered through the price of exchange service.

Proponents of increased charges for local service assert that the cost of the loop should not be recovered through usage charges. They claim that it is economically inefficient to impose a tax on usage-related services in order to help cover the cost of providing customers with access to the network. Currently, the common carrier line charge recovers a portion of the loop's cost through the price of toll services. The inflated toll price allows customers to obtain access to the network at a reduced rate. Alfred Kahn characterizes these price levels as inefficient because he posits that they discourage use of long-distance calling and encourage over-consumption of network access.³¹

²⁹Conference Report for the *Telecommunications Act of 1996*, 104th Congress, 2nd Session, Report 104-458, p.1.

³⁰I am focusing on customer access because it is the largest cost center associated with providing Universal Service. Many utility economists have attributed the need for a Universal Service fund to the regulated price of residential service and/or customer access.

³¹See, for example, David L. Kasserman and John W. Mayo, "Cross-Subsidies in Telecommunications: Roadblocks on the Road to More Intelligent Telephone Pricing," *Yale Journal on Regulation* 11: 119, 135; Alfred Kahn and William Shew, "Current Issues in Telecommunications Regulation: Pricing," *Yale Journal on Regulation* 4: 191, 202; and Alfred Kahn, "The Road to More Intelligent Telephone Pricing," *Yale Journal on Regulation* 1: 139, 142-143, 155 (1984). Kahn does recognize that there are two economic reasons why the price of exchange service may not cover the total cost of access—society may want to provide aid to those customers who can least afford telephone service, and since the value of network subscription decreases when one customer disconnects service, the externality of telephone

Economists adopt efficiency as one standard for judging the efficacy of a pricing structure. They maintain that society's welfare is enhanced when economic efficiency is raised. Alfred Kahn believes that efficient prices are the inevitable outcome of competition. It is this conviction which motivates his argument that, regardless of how politically unpalatable, regulators should recover the non-traffic sensitive costs exclusively through the exchange service rates. Furthermore, as telecommunications market becomes increasingly competitive, there will be an increased need to raise the price of exchange service. "The one thing that is certain is that the new regime of competition, on the one hand, and the perpetuation of the old regime of inefficient pricing, on the other, are fundamentally incompatible; one or the other is going to have to give."³² David Kasserman and John Mayo, among others, support Kahn's proposition that competition is forcing the nation to move to a more cost-based pricing structure. They assert that society's welfare will be enhanced by this transition but present little or no meaningful evidence to support their proposition that, in competitive markets, all customer access costs are recovered through a fixed customer charge.³³

Kahn's argument concerning the superiority of cost-based prices rests on the assertion that society's welfare is maximized if customers are charged a price which reflects the marginal cost-of-production. This is a fundamental tenet of economics and the logic is quite compelling. If customers are charged more for a product, such as long distance, than the cost society incurs in providing the product, the equilibrium level of output will be less than the amount that maximizes society's welfare. Consumers will purchase long-distance service up to the point that the additional benefit equals the

service should be reflected in the price for marginal customers. Ibid., pp. 144-45.

Some of the "economic" arguments for higher customer access charges are perverse. For example, Mayo and Kasserman make the illogical assertion that the fixed costs of the firm should be recovered exclusively through a fixed customer charge. When they write "fixed costs, by definition, bear no relationship to the volume of usage," the logical correlative statement would be neither are fixed costs attributable to providing customer access. Rather than making this statement, they assert that all fixed costs should be recovered through the price of customer access. "Cross-Subsidies in Telecommunications," p. 124.

³²Kahn, "More Intelligent Telephone Pricing," pp. 150, 151 (quote).

³³Kahn, "More Intelligent Telephone Pricing," p. 157; Kasserman and Mayo, "Telecommunications Cross-Subsidies," pp. 136-37; and Kahn and Shew, "Pricing," pp. 191, 192-93.

additional cost. If the price for toll service is set at a level which exceeds the costs that society must incur when producing the product, consumers will stop purchasing the product at a point where the value to a consumer is less than the cost society incurs in making the product available. Society's welfare would be maximized if the level of output is at the point where the value of the last call is equal to the cost society incurs in providing the call.

Kahn and other economists who work for the utility companies have argued for years that toll consumption is suppressed because the price of long-distance service is inflated by the common line charge. The price reflects a portion of the non-traffic sensitive cost of the loop, a cost that is not affected by the volume of toll calls. The price of the marginal toll call should not recover a portion of the cost of the loop because the cost of the network connection is independent of the volumes of calls.

Competition is the benchmark

Kasserman and Mayo, as well as Kahn, argue that competition will inevitably eliminate this inefficiency: "Competition inexorably drives prices to marginal costs."³⁴ These economists contend that the Commissioners should quickly raise the price of exchange service and lower the price of toll calls. These actions, they assert, would be consistent with competitive market behavior. Despite Kahn et al's appearance in numerous proceedings, few States have adopted their suggestions. Reflecting on the activities of regulatory commissions, Kasserman and Mayo recently asked:

Why have regulators continued to cling to this complex web of cross-subsidies (to the extent mounting competition and bypass permit) despite the desirable attributes of efficient pricing, the undesirable attributes of the existing cross-subsidies, and the challenge to rationalize telecommunications pricing Kahn issued a decade ago?...

...If regulators do not respond to the arguments we present, it may very well be because we are presenting the wrong arguments or presenting the right arguments wrongly.³⁵

³⁴Kasserman and Mayo, "Cross-Subsidies in Telecommunications," p. 137.

³⁵Kasserman and Mayo, "Telecommunications Cross-Subsidies," pp. 120, 142 (quote).